



A process for producing a purified aqueous hydrogen peroxide solution comprises contacting an aqueous hydrogen peroxide solution containing metal ion impurities firstly with a H^+ type cation exchange resin, secondly with a carbonate ion (CO_3^{2-}) type or bicarbonate ion (HCO_3^-) type anion exchange resin, and thirdly with a H^+ type cation exchange resin. Further, a process for producing a purified aqueous hydrogen peroxide solution comprises contacting an aqueous hydrogen peroxide solution containing metal ion impurities firstly with a H^+ type cation exchange resin, secondly with a fluoride ion (F^-) type anion exchange resin, thirdly with a carbonate ion (CO_3^{2-}) type or bicarbonate ion (HCO_3^-) type anion exchange resin, and fourthly with a H^+ type cation exchange resin.